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68610

5(3)

S/020/60/130/05/020/061

AUTHORS:

Dombrovskaya, N. S., Alekseyeva, Ye. A. B017/B005
Khokhlova, N. V., Posypayko, V. I.

TITLE:

The Basal Tetrahedron $1/2 \text{Li}_2\text{SO}_4 - \text{NaCl} - \text{RbNO}_3 - \text{TlBr}$ in the
7-Component Reciprocal System $\text{Li, Na, Rb, Tl} \parallel \text{Br, Cl, NO}_3, \text{SO}_4$

PERIODICAL:

Doklady Akademii nauk SSSR, 1960, Vol 130, Nr 5, pp 1027-1029
(USSR)

ABSTRACT:

The singular point of the reciprocal system of 16 salts
 $\text{Li, Na, Rb, Tl} \parallel \text{Br, Cl, NO}_3, \text{SO}_4$ (Ref 1) determining the
direction of the exchange reactions is described. The position
of the most stable basal tetrahedron $1/2 \text{LiSO}_4 - \text{NaCl} - \text{RbNO}_3 -$
 TlBr was determined in the center of the cube orienting the
singular point. Only 4 of its diagonals are fully stable:
 $\text{TlBr} - \text{RbNO}_3$; $\text{TlBr} - 1/2 \text{Li}_2\text{SO}_4$; $\text{RbNO}_3 - \text{NaCl}$ and $\text{NaCl} - 1/2 \text{Li}_2\text{SO}_4$.
The stability of the diagonal $\text{TlBr} - \text{NaCl}$ is less certain since
the solid solutions $\text{Tl}(\text{Br, Cl})$ and $\text{Na}(\text{Br, Cl})$ occur in the system
 $\text{Na, Tl} \parallel \text{Br, Cl}$. M. N. Zakhvalinskiy (Ref 2) found the presence

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The Basal Tetrahedron $1/2 \text{Li}_2\text{SO}_4 - \text{NaCl} - \text{RbNO}_3 - \text{TlBr}$ 68610
 in the 7-Component Reciprocal System Li, Na, Rb, S/020/60/130/05/020/061
 Tl, Br, Cl, NO_3 , SO_4 B011/B005

of 2 complex compounds on the diagonal $\text{RbNO}_3 - 1/2\text{Li}_2\text{SO}_4$ in
 lithium- and rubidium salts. They are presumably:
 $\text{Li}_2\text{SO}_4 \cdot \text{Rb}_2\text{SO}_4$ (1:1) and $4\text{Li}_2\text{SO}_4 \cdot \text{Rb}_2\text{SO}_4$ (4:1). The base of the
 tetrahedron is formed by the ternary system $1/2 \text{Li}_2\text{SO}_4 -$
 $\text{NaCl} - \text{RbNO}_3$. Besides the 3 crystallization fields of the
 components, this system contains 2 additional fields which
 correspond to the binary compounds mentioned. Besides the
 4 crystallization volumes of the components, the investigated
 part of the tetrahedron contains 2 relatively small volumes
 of the complex compounds of lithium- and rubidium sulfate
 (1:1 and 4:1). Rubidium sulfate is the exchange product
 between Li_2SO_4 and RbNO_3 . The 6 crystallization volumes meet
 in 2 quaternary points: the eutectic and the transition point
 lying in the "rubidium" corner of the diagram. Table 1 shows
 temperatures and compositions of the multiple points of the

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The Basal Tetrahedron $1/2 \text{Li}_2\text{SO}_4 - \text{NaCl} - \text{RbNO}_3 - \text{TlBr}$ S/020/60/130/05/020/061
in the 7-Component Reciprocal System Li, Na, Rb, B011/B005
Tl, Br, Cl, NO_3 , SO_4

ternary systems and of the quaternary system. Figure 1 shows an evolvment, figure 2 a perspective representation of the tetrahedron. The composition of the ternary and quaternary eutectic and transition points was determined by graphic constructions; the temperatures were determined by recording the heating curves on the recording pyrometer of N.S.Kurnakov. In conclusion, the following can be said about the type of the 7-component system of 16 salts: the tetrahedron investigated determines the reaction direction in a way similar to the "basal" triangle in a quinary reciprocal system of 9 salts (Ref 3), and also similar to the stable diagonal triangles in a quaternary reciprocal system of 6 salts (Ref 4), and finally similar to the stable diagonal of the square of a ternary reciprocal system of 4 salts. By means of an experimental determination of the fusibility of the system $1/2 \text{Li}_2\text{SO}_4 - \text{NaCl} - \text{RbNO}_3 - \text{TlBr}$, it was ascertained that the reciprocal

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The Basal Tetrahedron $1/2 \text{Li}_2\text{SO}_4 - \text{NaCl} - \text{RbNO}_3 - \text{TlBr}$ S/020/60/130/05/020/061
in the 7-Component Reciprocal System Li, Na, Rb, B011/B005
Tl||Br, Cl, NO_3 , SO_4

7-component system Li, Na, Rb, Tl||Br, Cl, NO_3 , SO_4 may be ✓
assigned to the class of reversible-reciprocal systems. There
are 2 figures, 1 table, and 5 Soviet references.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy i konstruktorskiy
institut khimicheskogo mashinostroyeniya (All-Union Scientific
Research and Design Institute of Chemical Machine Construction)

PRESENTED: October 15, 1959, by I. I. Chernyayev, Academician

SUBMITTED: October 12, 1959

Card 4/4

FOSYPAYKO, V.I.; DOMBROVSKAYA, N.S.

Exchange reactions and cleavage of the phase diagram of a quinary reciprocal system made up of nine salts: lithium, sodium and thallium chlorides, bromides, and sulfates. Dokl.AN SSSR 138 no.1:127-129 My-Je '61. (MIRA 14:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskogo mashinostroyeniya. Predstavleno akademikom I.V.Tananayevym.
(Systems (Chemistry))

POSYPAYKO, V.I.

Detection of the stages of stable diagonals and of the component heat effects in multicomponent reciprocal systems from the indices of polytope apexes. Zhur.fiz.khim. 36 no.10:2288-2290 0 '62.

(MIRA 17:4)

1. Vsesoyuznyy zaochnyy politekhnicheskiiy institut.

POSYPAYKO, V.I.; DOMBROVSKAYA, N.S.

Breaking up of the constitution diagram and the exchange reaction of a quinary reciprocal system consisting of nine salts: chlorides, bromides, and nitrates of sodium, rubidium, and thallium. Zhur. fiz.khim. 36 no.10:2275-2277 O '62. (MIRA 17:4)

1. Vsesoyuznyy zaochnyy politekhnicheskii institut.

POSYPAYKO, V.I.

Method of sectioning the composition diagrams of multicomponent reciprocal systems with complex formation. Zhur. fiz. khim. 37 no.9:1989-1994 S '63. (MIRA 16:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskogo mashinostroyeniya.

POSYPAYKO, V.I. (Moscow)

Sectioning of the first order prisms of composition diagrams of multi-component adiabatic-type reciprocal systems with complex formation. Zhur. fiz.khim. 37 no.10:2266-2272 0 '63. (MIRA 17:2)

1. Vsesoyuznyy zaachnyy politekhnicheskii institut.

L 18967-63 EFR/EPF(c)/EWP(q)/EWT(m)/BDS AFFTC/ASD/ESD-3 Ps-4/Pr-4 RM/WW/
JD/MAY/JG

ACCESSION NR: AP3006617

S/0076/63/037/009/1989/1994

AUTHOR: Posy*payko, V. I.

TITLE: Sectioning of composition diagrams of multicomponent mutual systems with complex formation

SOURCE: Zh. fizicheskoy khimii, v. 37, no. 9, 1963, 1989-1994

TOPIC TAGS: multicomponent system, mutual system, composition diagram, complex formation, Li, K, BO sub 2

ABSTRACT: The present work considers mutual systems of the diagonal type. It is based on previous experimental and theoretical studies by the same author involving a number of mutual systems with binary compounds, particularly $\text{Li} \parallel \text{K} \parallel \text{SO}_4, \text{BO}_2$; $\text{Li}, \text{K} \parallel \text{WO}_4, \text{BO}_2$; quaternary mutual system $\text{Li}, \text{K} \parallel \text{Cl}, \text{SO}_4, \text{WO}_4$; and quintuple mutual system of eight salts $\text{Li}, \text{K} \parallel \text{Cl}, \text{SO}_4, \text{WO}_4, \text{BO}_2$. Simple rules are proposed for sectioning a prism of the first order, representing composition diagram of quaternary, quintuple, hexadic, etc. mutual systems, with

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ACCESSION NR: AP3006617

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and without binary compounds between the components. Practical rules for deriving stable cells on participation of binary complexes in the sectioning of the composition diagram have been illustrated with real mutual systems of six and eight salts: Li, K||Cl, BO₂, WO₄ and Li, K||Cl, BO₂, NO₃, SO₄ used as examples. Orig. art. has: 5 figures and 4 tables.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatelnyy institut khimicheskogo mashinostroyeniya (All-Union Research Institute of Chemical Engineering)

SUBMITTED: 27Jun62

DATE ACQ: 30Sep63

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OTHER: 000

Card 2/2

L 18967-63 EPR/EPF(c)/EWP(q)/EWT(m)/BDS AFFTC/ASD/ESD-3 Ps-4/Pr-4 RM/WH/

JD/MAY/JG

ACCESSION NR: AP3006617

S/0076/63/037/009/1989/1994

77
75

AUTHOR: Posy*payko, V. I.

TITLE: Sectioning of composition diagrams of multicomponent mutual systems with complex formation

SOURCE: Zh. fizicheskoy khimii, v. 37, no. 9, 1963, 1989-1994

TOPIC TAGS: multicomponent system, mutual system, composition diagram, complex formation, Li, K, BO sub 2

ABSTRACT: The present work considers mutual systems of the diagonal type. It is based on previous experimental and theoretical studies by the same author involving a number of mutual systems with binary compounds, particularly $Li, K||SO_4, BO_2$; $Li, K||WO_4, BO_2$; quaternary mutual system $Li, K||Cl, SO_4, WO_4$; and quintuple mutual system of eight salts $Li, K||Cl, SO_4, WO_4, BO_2$. Simple rules are proposed for sectioning a prism of the first order, representing composition diagram of quaternary, quintuple, hexadic, etc. mutual systems, with

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2

and without binary compounds between the components. Practical rules for deriving stable cells on participation of binary complexes in the sectioning of the composition diagram have been illustrated with real mutual systems of six and eight salts: Li, K||Cl, BO₃, WO₄ and Li, K||Cl, BO₃, NO₃, SO₄ used as examples. Orig. art. has: 5 figures and 4 tables.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatelnyy institut khimicheskogo mashinostroyeniya (All-Union Research Institute of Chemical Engineering)

SUBMITTED: 27Jun62

DATE ACQ: 30Sep63

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SUB CODE: CH

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OTHER: 000

Card 2/2

POSYPAYKO, V.I.
POSYPAYKO, V.I.

Ternary systems consisting of metaborates, chlorides, sulfates, and tungstates of lithium. *Posypayko, V. I., Kislova, and A. I. Batsman (V. Al. Molodtsov State Univ., Rostov-on-Don). Zhur. Neorg. Khim. 1, 808-10 (1954).* — The ternary systems LiBO_2 - LiCl - Li_2SO_4 and LiBO_2 - LiCl - Li_2WO_4 were investigated. The binary system LiCl - LiBO_2 has a eutectic at 572° and 19 mol. % LiBO_2 ; the LiCl branch has a break at 590° and 8% LiBO_2 for the $\alpha \rightarrow \beta$ transition; and the LiBO_2 branch has a transition from $\alpha \rightarrow \beta$ at 815° and 6% LiCl . The binary system LiBO_2 - Li_2SO_4 was treated previously (C.A. 50, 16321b); it is characterized by a congruently melting compd., $3\text{Li}_2\text{SO}_4 \cdot 2\text{LiBO}_2$, with transitions at 737° and 18% LiBO_2 and at 737° (again) and 31% LiBO_2 . There is a eutectic at 46.5% LiCl and 478° . To obtain the triangular diagram for LiBO_2 - LiCl - Li_2SO_4 , there were taken 9 "internal cross-sections" with 9-15 points in each. In the binary LiBO_2 - Li_2WO_4 system, there is an incongruently-melting compd., $3\text{Li}_2\text{WO}_4 \cdot 2\text{LiBO}_2$. In the binary Li_2WO_4 - Li_2SO_4 system there is a eutectic at 596° and 63% Li_2SO_4 . The triangular diagram for LiBO_2 - Li_2SO_4 - Li_2WO_4 used 10 "inner cross-sections." Starting again with the binary system LiCl - LiBO_2 , 7 "inner cross-sections" were used to establish the triangular diagram for LiBO_2 - LiCl - Li_2WO_4 . Among the data for important points in these various binary and ternary diagrams, the following invariant points can be mentioned: 2.5% (LiBO_2), 37.5% (LiCl), 60% Li_2SO_4 , melting at a temp. of 472° , and the 3 invariant points in the LiBO_2 - Li_2SO_4 - Li_2WO_4 system: the eutectic at 590° (5% LiBO_2 , 71% Li_2SO_4 , 24% Li_2WO_4), and 2 transition points at 650° (10% LiBO_2 , 70% Li_2WO_4 , and 20% Li_2SO_4) and at 604° (12.5% LiBO_2 , 15% Li_2WO_4 , 72.50% Li_2SO_4). V. H. G.

POSYPAYKO, V. I.

7 7 6
3-4E4;
The ternary system of potassium metaborate, chloride, and phosphate V. I. Posypayko, G. M. Buchman, and A. I. Kisova. Zhur. Neorg. Khim. 1, 2613-14 (1950).--In the system $K_2Cl_2-K_2WO_4-K_2(BO_3)_4$, the only complex salt is $K_2WO_4 \cdot 2KBO_3$ (I), which appears at concns. of 10-32.5% $K_2(BO_3)_4$ and 0-18% K_2Cl_2 . The m.p. of the system in the area of stability of I varies from 740° (in equil. with 18% $K_2(BO_3)_4$, 65% K_2WO_4 , and 19% K_2Cl_2) to 785°. The eutectic point at 604° is in equil. with all 3 simple salts, as solid phases, and a liquid phase compn. of $K_2(BO_3)_4$ 8, K_2Cl_2 41, and K_2WO_4 51%.

G. M. Buchman

RM
MT

USSR/Thermodynamics. Thermochemistry. Equilibria. Physico-Chemical B-8
 Analysis. Phase Transitions

Abs Jour : Ref Zhur - Khimiya, No 8, 1957, 26144

Author : V.I. Posypayko, A.I. Kislova, A.G. Berman

Title : Ternary Systems of Lithium Metaborates, Chlorides, Sulfates
 and Tungstates

Orig Pub : Zh. neorgan. khimii, 1956, 1, No 4, 806-819

Abstract : The ternary systems LiBO_2 (I) - LiCl (II) - Li_2SO_4 (III),
 I - II - Li_2WO_4 (IV) and I - II - IV were studied by the
 visual-polythermal method. The binary system I - II re-
 presenting a simple eutectic system with the eutectic
 point at 572° and 19% of I was studied for the first time.
 Nine ternary interior cross-sections in the system I - II -
 III were studied, their graphs and tabulated data were
 shown. The crystallization area consists of four fields:
 of fields of components and of the compound $3\text{Li}_2\text{SO}_4 \cdot 2\text{LiBO}_2$.
 There are one ternary eutectic point (the composition is
 everywhere given in mol.%): 2.5% of I and 37.5% of II at
 472° , and a transition point at 660° and 15% of I and 77.5%
 of III. The system I - III - IV is the upper base of the

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USSR/Thermodynamics. Thermochemistry. Equilibria. Physico-Chemical B-8
Analysis. Phase Transitions.

Abs Jour : Ref Zhur - Khimiya, No 8, 1957, 26144

prism of the quaternary system Li, K // BO_2 , WO_4 and SO_4 . The binary systems I - III, I - IV and III - IV were studied for the first time. The compound of the composition $3\text{Li}_2\text{WO}_4 \cdot 2\text{LiBO}_2$ decomposing when being melted was discovered in the first system, as well as the transition of I from the α -form into the β -form at 815° and 87.5% of I. These are in the binary system I - III a congruently melting compound $3\text{Li}_2\text{SO}_4 \cdot 2\text{LiBO}_2$ (V) at 742° and eutectic points at 737° and 31% of I. There is an eutectic in the binary system III - IV at 596° and 68% of III. Ten cross-sections were studied in the system I - III - IV, the graphs and the fields of components and binary compounds were shown. There are one ternary point at 590° and 5% of I and 71% of III and two transition points: one at 650° and 10% of I and 70% of IV, and another at 604° and 12.5% of I, 15% of IV and 72.5% of III. The system I - II - IV is a triangle of the prism of the quaternary system Li, K // BO_2 , B_2O_3 , WO_4 . The binary system II - IV, having an eutectic at 490° and 41.5% of

Card : 2/3

POSYPAYKO, V.I.; DOMBROVSKAYA, N.S.

Singular star of a quinary reciprocal system consisting of
nine salts--lithium, sodium and thallium chlorides, bromides, and
sulfates. Zhur. neorg. khim. 6 no.3:712-719 Mr '61.

(MIRA 14:3)

(Systems(Chemistry))

POSYPAYKO, V.I.; DOMBROVSKAYA, N.S.

Exchange reactions in the quintary reciprocal system consisting of
nine salts of lithium, sodium, and thallium chlorides, bormides,
and sulfates. Zhur.neorg.khim. 6 no.6:1408-1417 Je '61.
(MIRA 14:11)

(Systems (Chemistry)) (Salts)

POSYPAYKO, V.I.; KHAKHLOVA, N.V.; ALEKSEYEVA, Ye.A.; DOMBROVSKAYA, N.S.

Singular decomposition of the polytope of the quintary reciprocal
system consisting of nine salts: Na, Rb, Ti || Cl, Br, NO₃.
Zhur.neorg.khim. 6 no.6:1401-1407 Je '61. (MIRA 14:11)
(Salts) (Systems (Chemistry))

POSYPAYKO, V.I.; DOMBROVSKAYA, N.S.

Exchange reactions in the quinary reciprocal system consisting
of eight salts with two double compounds. Zhur.neorg.khim. 7
no.3:645-649 Mr '62. (MIRA 15:3)
(Systems (Chemistry))

DOMBROVSKAYA, N.S.; POSYPAYKO, V.I.

Determination of a relative stability of salts in multicomponent
reciprocal systems. Zhur.neorg.khim. 7 no.10:2434-2437 0 '62.
(MIRA 15:10)

(Systems (Chemistry)) (Salts)

POSYPAYKO, V.I.

Method for the determination of the degrees of stable diagonals
in multicomponent reciprocal systems. Zhur.georg.khim. 19 no.1:
231-236 Ja '63. (MIRA 16:5)

(Systems (Chemistry))

POSYPAYKO, V.I.; DOMBROVSKAYA, N.S.

Exchange reactions in the quinary reciprocal system consisting of
nine salts: chlorides, bromides, and nitrates of sodium, rubidium,
and thallium. Zhur.neorg.khim. 8 no.2:407-412 F '63. (MIRA 16:5)
(Systems (Chemistry)) (Salts)

POSYPAYKO, V.I.

Change of the type of singular star of quinary systems when a
sulfate ion is substituted for halides. Zhur.neorg.khim. 8
no.9:2178-2183 S '63. (MIRA 16:10)

POSYPAYKO, V.I.

Determination of the steps of stable diagonals and component
heat effects in quinary reciprocal systems consisting of 9
salts. Zhur. neorg. khim. 9 no.7:1701-1706 J1 '64.

Actual representatives of quinary reciprocal systems
consisting of 9 salts of the types D and E. Ibid.:1707-
1711 (MIRA 17:9)

POSYPAYKO, V.I.

Effect of sulfate ions on the change of the singular star of quinary reciprocal halide systems consisting of nine salts of lithium, sodium, potassium, and rubidium. Zhur. fiz. khim. 39 no.3:736-738 Mr '65.
(MIRA 18:7)

1. Vsesoyuznyy zaochnyy politekhnicheskii institut.

DOMBROVSKAYA, N.S.; POSYPAYKO, V.I.; ALEKSEYEVA, Ye.A.; KHAKHLOVA, N.V.

Stable elements of hepta-component reciprocal systems. Dokl.
AN SSSR 165 no.5:1081-1084 D '65.

(MIRA 19:1)

1. Submitted May 13, 1965.

POSYPAYKO, V.I., doktor khim.nauk (Moskva); KORETS, G.M. (Kislovodsk);
PISMAIINIK, A.S. (Moskva); KAZAKOV, D.T. (Vladimir); KULAKOV, V.Ye.;
IL'IN, G.S., doktor biolog.nauk; NEYFEL'DT, I.A., kand.biolog.nauk

Books. Priroda 55 no.1:12,49,109,111-113 Ja '66. (MIRA 19:1)

1. Leningradskiy pedagogicheskiy institut im. A.I.Gertsena
(for Kulakov). 2. Zoologicheskiy institut AN SSSR, Leningrad
(for Neyfel'dt).

POSYPAYKO, V.I.

Thermochemical relations in quinary reciprocal systems consisting of nine salts. Zhur. fiz. khim. 39 no.2:423-425 F '65.

Representatives of quinary reciprocal systems consisting of nine salts of the type D and E. Ibid.:425-427 (MIRA 18:4)

1. Vsesoyuznyy zaochnyy politekhnicheskii institut.

POSYPKIN, Gennadiy Ivanovich; MYAGKOV, M.M., red.; GOLICHENKOVA, A.A.,
tekh.n.red.

[Workers' technical creativity] Tekhnicheskoe tvorchestvo
rabochikh. Moskva, Izd-vo VTsSPS, Profizdat, 1959. 77 p.
(MIRA 13:5)

1. Predsedatel' zavodskogo soveta Vsesoyuznogo obshchestva
izobretateley i ratsionalizatorov (VOIR) (for Posypkin).
(Railroads--Cars--Construction)
(Efficiency, Industrial)

POSYPKIN, A.N., podpolkovnik meditsinskoy sluzhby

Treatment of patients with hypertension at the Zvenigorod rest
home. Voen.-med.zhur. no.7:48-49 J1 '59. (MIRA 12:11)
(HYPERTENSION ther)

POSYPKIN, A.N., podpolkovnik meditsinskoy sluzhby

Treatment of slowly healing ulcers with mineral water from the
Kuldur Health Resort. Voen.-med. zhur. no.6:79 Je '61. (MIRA 14:8)

(EXTREMITIES, LOWER--ULCERS)
(THERAPEUTICS, PHYSIOLOGICAL)

VORONOV, V., inzh.; LOKSHIN, A., inzh.; POSYSAIEV, A., inzh.

Year-round operating mortar plant. Stroitel' no.3:19-23
Mr '60. (MIRA 13:6)

(Mortar)

POSYSAYEV, A.

VN-2 vibration force pump. Stroitel' no.6:11 Je '61. (MIRA 14:7)
(Pumping machinery)

VECHER, N.A.; UMRIKHIN, P.V.; PANFILOV, M.I.; PASTUKHOV, A.I.; TSEKHANSKIY,
M.I.; ARONOVICH, M.S.; POSYSAYEV, A.A., inzh.; GARCHENKO, V.T.;
ORMAN, M.Ye.

Review of D.A.Smoliarenko's book "Quality of carbon steel."
Stal' 23 no.9:800-804 S '63. (MIRA 16:10)

POSYSAYEV, A.G.

Genesis of ore "boulders" in the Zolotushinskoye complex metal
deposit and two mineralization stages. Trudy SNIGGIMS no.6:
93-101 '61. (MIRA 15:7)
(Altai Mountains--Ore deposits)

POSYSAYEV, A.I., inzhener.

Rapid-filling pressure vessel with automatic mixing of the paint
compound. Biul.stroi.tekh.13 no.7:18-20 J1 '56. (MIRA 9:9)
(Painting, Industrial)

POSYSAYEV, A.I., inzhener.

The S-285A mobile continuous mortar mixer. Mekh.stroi. 13 no.10:
11-14 0 '56. (MLRA 9:11)

(Mortar) (Mixing machinery)

POSYSAYEV, A.I., inzhener.

Continuous-operation mobile mortar mixer. Biul. stroi. tekhn.
13 no.6:15-18 Je '56. (MLRA 9:9)

(Mixing machinery)

POSYSAYEV, A.I.; VORONOV, V.I.; LOKSHIN, A.V.; OGIYEVICH, V.A.,
kand. tekhn. nauk, reitsent; SMIRNOVA, V.L., red. izd-va;
VLADIMIROVA, L.A., tekhn. red.

[The S-285V mobile automated continuous mortar mixer] Pere-
dvizhnaia avtomatizirovannaia rastvorosmesitel'naia ustanov-
ka S-285V nepreryvnogo deistviia. Moskva, Mashgiz, 1962. 73 p.
(MIRA 15:7)

(Mortar) (Mixing machinery)

TEPLYAKOV, A.; POSYSAYEV, N.; TAYMANOV, E.

Soviet engineering news, NTO 2 no.12:58-59 D '60,
(Technological innovations)

(MIRA 14:3)

POSYSAYEV, N.

Stimulant from yeast. Nauka i zhizn' 27 no.12:46 D '60.
(MIRA 13:12)

(URIDINE PHOSPHATE)

(SHOCK)

POSYSAYEV, N.

Monoyein. Nauka i zhizn' 28 no.3:42 Mr '61.
(ANTIBIOTICS)

(MIRA 14:3)

L 27994-66 EEC(k)-2/EWA(h)/EWT(d)/EWT(1)/EWA(d)/FSS-2 GH/WS-2

ACC NR: AN6015751 (N)

SOURCE CODE: UR/9023/66/000/043/0003/0003

AUTHOR: Posysayev, N.

ORG: none

TITLE: Earth-Meteor-Earth. [Meteor trails as a medium of radio communication]

SOURCE: Sovetskiy patriot, 29 May 66, p. 3, col. 3-5

TOPIC TAGS: radio signal, meteor trail, signal transmission, navigation
system, radio communication

ABSTRACT: The use of ionized molecules in the wake of a burning meteor¹² as a means of relaying radio signals is discussed. Sending and receiving stations must await the emergence of a meteoric trail. The antenna of the transmitter emits a continuous coded signal; in the absence of meteors, this signal either dies completely in the ionosphere or reaches the receiver antenna in distorted form. Despite certain drawbacks, an enormous amount of data can be transmitted in a short space of time, i. e., 5-10 thousand words a minute. It is suggested that meteoric radio communication may serve as the basis for a universal navigation system and for the broadcasting of accurate standard time signals.

SUB CODE: 17,03 / SUBM DATE: none

Card 1/1 *de*

POSYSAYEV, N.

Colimycin. Nauka i zhizn' 27 no.9:61 S '60. (MIRA 13:9)
(ANTIBIOTICS)

POSYSAYEV, N.

Valuable materials made of wood waste. Zhil.stroi. no.11:20-21
'59. (MIRA 13:4)
(Wood waste)

POSYSAYEV, N.S.

Let us look inside metals. Mashinostroitel' no.7:44-46 '61.
(Metals—Testing) (MIRA 14:7)

CHELYUSTKIN, A.B.; POSYSAYEV, N.S.

Automatic machines are our helpers. Mashinostroitel' no.3:
8-9 Ag '62. (MIRA 15:8)

1. Zamestitel' direktora Instituta avtomatiki i telemekhaniki
AN SSSR.

(Automation)

POSTYSAYEV, N.S.

BOGUSHNEVICH, Ye.N. (Moscow); SHNEVLYEV, A.P. (Moscow); BORTNIKOV, V.B. (Kishinev); NECHAYEV, G.A. (Leningrad); KARAKOV, I.I. (Kiyev); KLOPOTOVSKIY, I.S. (Leningrad); GALAKHOV, G.K.; POSTYSAYEV, N.S. (Moscow).

Discussion on methods for determining the coefficient of prefabrication in construction. Stroit. prom. 36 no.6:38-45 Je '58.
(Precast concrete construction) (MIRA 11:6)

POSYSAYEV No.5.

POSYSAYEV, N.S.

Using hydraulic rams in water supply systems. Vod. i san. tekhn. no.12:
20-22 D '57.

(Water supply, Rural) (Pumping machinery)

(MIRA 11:1)

L 39380-65 EWT(d)/EWT(m)/FA/FA(b)/EWP(h)/T-2/EWA(d)

S/0026/65/000/002/0066/0067

ACCESSION NR: AP5005258

AUTHOR: Posysayev, N. S. (Moscow)

TITLE: Ornithopters

SOURCE: Priroda, no. 2, 1965, 66-67

TOPIC TAGS: ornithopter, flapping wing vehicle

ABSTRACT: For several years now former pilots A. V. Shiukov, I. N. Vinogradov, and others, members of the Ornithopter Committee of the Aviation Sport Federation, USSR, in cooperation with Doctor of Biological Sciences G. S. Shestakova, Candidates of Science T. L. Borodulina, V. E. Yakobi, and I. V. Kokshayskiy of the Institute of Animal Morphology im. A. N. Severtsov, Academy of Sciences, USSR, have been investigating the mechanics and aerodynamics of bird flight. Heretofore unknown principles of the phenomenal lift produced by the wing have been discovered. The value of a flying machine with flapping wings lies in the fact that it offers safety in flight and in landing, even when forward speed is lacking. In case of engine failure aloft, the ornithopter can make a smooth landing by spreading its wings. It can operate from small runways. The aerodynamics of a flapping wing is much more complex than that of the conventional aircraft wing, since it is based on little-known

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L 39380-65

ACCESSION NR: AP5005258

principles of eddy currents. Members of the Ornithopter Committee have already learned 14 factors effecting the function of the wing (torsional oscillations, slit wing, balancing the wing in an air current, the effect of feather structures, etc.). Ornithopter models have been designed which use various forms of motive power and test stands have been built for studying the mechanics of wings and other parts of the ornithopter. On 19 April 1964 an ornithopter model competition was held at the Dinamo Stadium in Moscow. Much remains to be learned about the significance of all the details of wing structure. It can be assumed that in the next few years the basic problem of flight with flapping wings will be solved. A photograph of an ornithopter designed by M. G. Lyakhov is shown in Fig. 1 of the Enclosure. Orig. art. has: 1 figure.

[SA]

ASSOCIATION: none

SUBMITTED: 00

ENCL: 01

SUB CODE: AC

NO REF SOV: 001

OTHER: 000

ATD PRESS: 3194

Card 2/3

POSYSAYEVA, A.D.

Measures for the elimination of seasonal production. Kons.
i ov. prom. 18 no.12:28-31 D '63. (MIRA 17:1)

1. Tsentral'nyy nauchno-issledovatel'skiy institut konservnoy
i ovoshchesushil'noy promyshlennosti.

CHALYY, M. I.; KOVESHNIKOV, A. S.; VLASOVA, V. P.; POSYSAYNVA, A. I.

Modernized NM pump-mixer. Suggested by M. I. Chalyi, A. S.
Koveshnikov, V. P. Vlasov, A. I. Posysaev. Rats. i izobr. predl. v
stroit. no. 12:58-59 '59. (MIRA 13:5)

1. Sotrudniki Tsentral'noy nauchno-issledovatel'skoy laboratorii
No. 3 Glavstroya,stantsiya Lyublino, Moskovskoy oblasti,
Shkol'nyy per., d. 3.

(Mixing machinery)

Posysayeva, L. I.

133-1-19/24

AUTHORS: Meshcherinova, O.N., Candidate of Technical Sciences,
Posysayeva, L.I., Engineer, and Khasin, G.A.

TITLE: Metallurgical Properties of Structural Boron Steels
(Metallurgicheskiye osobennosti konstruktsionnykh
boristyykh staley)

PERIODICAL: Stal', 1958, No.1, pp. 75 - 81 (USSR).

ABSTRACT: A systematic investigation of special features of smelting boron-containing structural steels in order to establish optimal conditions for deoxidation and introduction of boron into the metal was carried out. The smelting was done in 60-ton basic open-hearth furnaces with additions of ferro-boron or ferro-boral (the composition is given). Altogether, 126 open-hearth heats of steels of various composition were investigated (Table 1). The technology of smelting was the same as is usual for corresponding steels except for the final deoxidation which was carried out in the ladle by the following methods: 1) after the ladle was 1/5th filled, 45% ferro-silicon was added, followed by aluminium (1 kg/ton for steel 20XTP and 0.6 kg/ton for other steels containing 0.3% or more of carbon) and lumps (40-70 mm in size) of ferro-boron or ferro-boral. Steel was teemed into 3.6-ton ingots which were passed to the blooming department in the hot state. 2) Before

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Metallurgical Properties of Structural Boron Steels 133-1-19/24

adding ferro-boron and ferro-boral, aluminium was first introduced (as in 1)) followed by ferro-titanium in a proportion of 0.03, 0.06, and 0.07% (without taking into consideration titanium losses); for steel 45P the maximum addition of titanium was 0.1%. 3) Before adding ferro-boron or ferro-boral, aluminium was added (as in 1)), then vanadium (0.05%) and ferro-boron or ferro-boral. Chemical composition of slags (from the furnace before tapping and from the ladle after teeming) and metal (from the furnace before tapping and mean during teeming) is given in Table 2. Boron losses due to oxidation in all heats investigated amounted to 40-60%. Rolling of steel containing boron did not present any difficulties, the quality of the surface of ingots and rolled metal was satisfactory. The influence of boron content on the hardenability of steel was carried out on a 60-ton heat of steel 20XrP which was cast into ingots with various boron contents (added to ingot moulds), the latter being 0, 0.01, 0.003, 0.006 and 0.008% (Fig.1). With increasing boron content from 0.003% to 0.01% (as calculated) the hardenability of steel somewhat improved. The improvement in hardenability obtained for steels preliminarily deoxidised with titanium (Figs. 2 and 3) indicated that the efficiency of the

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Metallurgical Properties of Structural Boron Steels 133-119/24

utilisation of boron increases when after deoxidation with aluminium, titanium is introduced in order to combine nitrogen into stable nitrides. Cross-sectional hardenability was additionally determined for steels 20XFP and 35XPA. Specimens of 40, 60, 80 and 100 mm in diameter and over two diameters long after preliminary normalisation were hardened in water after which the hardness along two perpendicular diameters was determined (Figs. 4 and 5). Unlike normal steels, the hardenability of some steels containing boron decreased with increasing temperature from which steel was hardened (Fig.6). The dependence of the grain size of austenite on the content of boron and kinetics of the grain growth in steels of various chemical composition was also investigated. The grain size was evaluated according to OCT 5639-51 and determined by the following methods:

- a) cementation at various temperatures with 8 hours soaking;
- b) oxidation of grain boundaries in oxidising and vacuo furnaces;
- c) obtaining ferritic network by two hours isothermal treatment at 700 °C of specimens heated to 850 - 1150 °C at 50° intervals (soaking for 1 hour). Characteristic structures of specimens from steel 20XFP, the composition of which differed only in the boron content is shown in Fig.7, the influence of the method of deoxidation on the grain size - Table 3, and the

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133-1-19/24

Metallurgical Properties of Structural Boron Steels

kinetics of growth of austenitic grains - Fig.8. On investigating the micro-structure of specimens heated to a high temperature, the presence of excess boron phase was observed (Figs. 9 and 10). The dependence of mechanical properties on the content of boron and additions of titanium was investigated on specimens preliminarily normalised at 920 °C (6 hours), hardened in oil from 860 °C (soaking 1 hour) and tempered at 200 °C (3 hours). The dependence of impact strength of steel 20XTP on the boron content - Fig.11. Mean mechanical properties of steels investigated - Table 4. Conclusions: 1) The size of austenitic grain depends on the amount of boron introduced; the more boron added, the coarser is the grain and the non-uniformity of grain size is more pronounced. 2) Plastic properties of steel after hardening and tempering (at a high or a low temperature), in particular, impact strength decreases with increasing boron content. 3) The negative influence of boron on the size of austenitic grain, non-uniformity of grain size and impact strength can be considerably decreased by a correct practice of the final deoxidation of steel with aluminium and titanium (when boron is introduced by additions of ferro-boron or ferro-boral), i.e. with aluminium in an amount of 1 kg/ton

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Metallurgical Properties of Structural Boron Steels 133-1-19/24

when steel contains up to 0.3% of carbon and 0.6 kg/t when steel contains above 0.3% of carbon; with titanium in an amount of 0.06 - 0.1%, depending on the composition of the steel and its destination. 4) The use for final deoxidation of aluminium and titanium before adding boron secures satisfactory hardenability, sufficiently small and uniform austenitic grain and high mechanical properties of steels. 5) An additional investigation of the relationship between the composition of steel (mainly carbon content) and optimum amount of boron added is necessary. There are 4 tables, 11 figures and 4 references, 2 of which are Russian and 2 English.

ASSOCIATION: Zlatoust Metallurgical Works (Zlatoustovskiy metallurgicheskiy zavod) and TsNIICHM.

AVAILABLE: Library of Congress
Card 5/5

POSYSAYEVA, L.I.

Nonmetallic inclusions in high-chromium steel. Sbor. trud.
TSNIICHM no.32:59-71 '63. (MIRA 16:12)

KHASIN, G.A.; VACHUGOV, G.A.; MENUSHENKOV, P.P.; POSYSAYEVA, L.I.; MEDOVAR, B.I.;
MAKSIMOVICH, B.I.

Production of EI736 and EI961 steel by the electric slag remelting
method. Avtom. svar. 16 no.9:78-81 S '63. (MIRA 16:10)

1. Zlatoustovskiy metallurgicheskiy zavod (for Khasin, Vachugov,
Menushenkov, Posysayeva). 2. Institut elektrosvariki im. Ye.O.
Patona AN UkrSSR (for Medovar, Maksimovich).

POSYSAYEVA, L. I.

Distr: 4E4j/4E2c

27
✓ Metallurgical characteristics of boron-bearing structural steels. D. N. Meshcherinova, L. I. Posysayeva, and G. A. Khasin (Met. Plant, Zlatoust). Sov. 18, 75-81 (1953). — Enriched with 0.002-0.01% B addn. on plain C and on 0.4-1.1% Cr steel was investigated on production heats. B was added either before deoxidizing with Al, or after Al and Ti addn. In the first case, B causes coarse grain. The presence of the borides at the grain boundaries was verified; they are present in the absence of sufficient C in the steel.

11
I. D. Oat

S/123/60/000/010/001/011
A004/A001

Translation from: Referativnyy zhurnal. Mashinostroyeniye, 1960, No. 10, p. 21,
48950

AUTHORS: Khasin, G.A., Posysayeva, L.I.

TITLE: The Structural Peculiarities of the X17H2 -Kh17N2- (34¹⁶268 - EI268)
Grade Steel Depending on Its Machining Conditions

PERIODICAL: V sb.: Metallovedeniye i term. obrabotka. ("Stal'", 1958, Prilozh.) ✓
Moscow, 1959, pp. 177-191

TEXT: The authors investigated the effects of the chemical composition (as to C, Cr and Ni) and machining conditions on structural changes, deformation ability and mechanical properties of the Kh17N2 grade steel. It is shown that the defects which can be observed during the process of steel machining - fissures, cracks, lowering of mechanical properties and poor machinability owing to high hardness - are the results of unfavorable relation between the α - and γ -phase at high temperatures. If the C-, Cr- and Ni-contents, and also the heating temperature, vary, the α -phase quantity is altered. The minimum quantity of α -phase, improvement of deformation ability of the steel, high and stable

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S/123/60/000/010/001/011
A004/A001

The Structural Peculiarities of the X17H2 -Kh17N2- (3M268 -EI268-) Grade Steel
Depending on Its Machining Conditions

mechanical properties can be obtained if the steel has the following composition (in %): C = 0.14-0.17, Mn = 0.50-0.80, Cr = 16.0-17.0 and Ni = 2.0-2.5. It is recommended to subject the steel after rolling to slow cooling with subsequent annealing, while the softening heat treatment should be effected at a heating temperature of +670°C. It is necessary to increase the hardening temperature from 950-975°C (according to OST -GOST-) to 1,020-1,040°C.

Translator's note: This is the full translation of the original Russian abstract.

Card 2/2

ACC NR: AP6031719

(N)

SOURCE CODE: UR/0370/66/000/005/0102/0106

AUTHOR: Gulyayev, A. P. (Moscow); Zotova, Ye. V. (Moscow); Ustimenko, M. Yu. (Moscow);
Posysayeva, L. I. (Moscow)

ORG: none

TITLE: Development of high-strength corrosion-resistant alloy

SOURCE: AN SSSR. Izvestiya. Metally, no. 5, 1966, 102-106

TOPIC TAGS: *IRON BASE ALLOY, CHROMIUM BASE ALLOY, NICKEL BASE ALLOY,* corrosion resistant alloy, high strength alloy, age hardenable alloy, iron chromium nickel alloy, molybdenum containing alloy, copper containing alloy, titanium containing alloy, aluminum containing alloy/OKhN40MDTYu alloy

ABSTRACT: *16* OKh23N28M3D3T (EI943) *16* steel has adequate corrosion resistance in sulfuric acid at temperatures up to 80C but its low strength limits its use in the modern chemical industry. Therefore, efforts have been made to develop an alloy which will combine the necessary corrosion resistance with adequate strength. A series of iron-chromium-nickel-base alloys additionally alloyed with titanium, niobium, aluminum, molybdenum and copper were tested. On the basis of experimental findings, the new OKhN40MDTYu alloy (Electrostal Plant designation EP543) was developed. The alloy contains: 0.06 carbon, 0.8% silicon, 0.8% manganese, 14—17% chromium, 39—42% nickel, 4.5—6% molybdenum, 0.7—12% aluminum and 2.7—3.3 copper. The alloy is age-hardenable. Alloy solution-heat treated and aged at 700—800C has the following minimum values of

Card 1/2

UDC: 669.018.8

Card 2/2 mt

L 04772-6Z EWT(m)/EWP(w)/EWP(v)/EWP(k)/EWP(t)/ETI IJP(c) JD/HM/WB

ACC NR: AP6025721

SOURCE CODE: UR/0365/66/002/004/0450/0454

AUTHOR: Babakov, A. A.; Posysayeva, L. I.; Zotova, Ye. V.

ORG: Central Scientific Research Institute of Ferrous Metallurgy
(Tsentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii)

TITLE: Physical-mechanical and technological properties of
OKh23N28M3D3T (E1943) steel, resistant to sulfuric acid

SOURCE: Zashchita metallov, v. 2, no. 4, 1966, 450-454

TOPIC TAGS: corrosion resistant steel, austenite steel, steel property,
welding, arc welding, metal deformation/OKh23N28M3D3T steel

ABSTRACT: The properties of OKh23N28M3D3T (E1943), one of the
austenitic steels developed at TsNIICHERMET and the Institute of
Physical Chemistry AN SSSR, are examined. E1943 has increased corrosion
resistance to different aggressive media--sulfuric, phosphoric, oxalic,
formic acids-- by which Kh18N10T and Kh17N13M3T steels are rapidly
attacked. E1943 has a tendency toward embrittlement upon prolonged
holding at 800-900°. This steel is not subject to intercrystalline
corrosion after hardening at 1020-1050° in water and holding at 700° for
20 minutes. E1943 has good deformation properties under both hot and

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UDC: 620.193.41:669.228

1. 04772-67

ACC NR: AP6025721

5
cold working conditions, good technological effectiveness and weldability, especially with the use of argon arc welding. Because of these properties this steel lends itself to industrial use in media too corrosive for Kh17N13M3T and where N70M28 (EP-496) or Kh15N55M16 (EP-576) alloys are too expensive. Orig. art. has: 3 tables and 2 figures.

SUB CODE: 11 / SUBM DATE: 22Nov65/ ORIG REF: 007

Card 2/2 88

POSYSAYEVA, L.I.

Nonmetallic inclusions and their distribution in 3Kh13,
4Kh13, and 12Kh5MA steel ingots. Sbor. trud. TSMIICHM
no.38:66-75 '64. (MIRA 18:3)

POSYSAYEV, N.S. (Moskva)

Ornithopters. Priroda 54 no.2366-67 P 165.

(MIRA 18:10)

L 2449-66

EWI(m)/EPF(c)/EWP(t)/EWP(z)/EWP(b)

IJP(c)

JD/HW/JG/WB

ACCESSION NR: AF5021979

UR/0286/65/000/014/0042/0042

669.14.018.84

669.15'24'26'28-194

AUTHOR: Gulyayev, A. P.; Zogova, Ye. V.; Posysayeva, L. I.; Ustimenko, M. Yu.

TITLE: Iron-base alloy. Class 18, No. 172869

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 14, 1965, 42

TOPIC TAGS: alloy, iron alloy, nickel containing alloy, chromium containing alloy, titanium containing alloy, aluminum containing alloy, molybdenum containing alloy, silicon containing alloy, copper containing alloy, manganese containing alloy

ABSTRACT: This Author Certificate introduces an iron-base alloy which, for increased corrosion resistance, contains 0.09% max carbon, 35-45% nickel, 14-19% chromium, 2-4% titanium, 0.8-1.5% aluminum, 4-8% molybdenum, 2-4% copper, 0.5% max silicon, and 0.8% max manganese.

ASSOCIATION: Tsentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii im I. P. Bardina (Central Scientific Research Institute of Ferrous Metallurgy)

Card 1/1

L 2449-66

ACCESSION NR: AP5021979

SUBMITTED: 02Nov63

NO REF SOV: 000

ENCL: 00

OTHER: 000

0
SUB CODE: MM

ATD PRESS: 4109

BVK

Card 2/2

POSYSAYEVA, L.I.

Nonmetallic inclusions and their distribution in 13Kh14NVFRA, Kh28,
Kh18 steel ingots. Sbor. trud. TSNIICHM no.39:181-190 '65. (MIRA 18:7)

POSTĘPOZYSKI, L.

Machines for working bands of polyamide fibers. p. 357.

PRZEGLĄD WŁOKIENNICZY. (Stowarzyszenie Inżynierów i Techników Przemysłu Włokienniczego) Lodz, Poland, Vol. 13, No. 7, July 1959.

Monthly list of East European Accessions (EEAI) LC, Vol. 9, No. 2, Feb. 1959.

Uncl.

POSZEPCHYNSKI, W

All-Union Scientific Research Institute of the Meat Industry in Moscow. p.37

GOSPODARKA MIESNA. (Polskie Wydawnictwa Gospodarcze) Warszawa, Poland.
Vol. 11, no. 7/8, July/Aug. 1959

Monthly List of East European Accessions. (EEAI) LC, Vol. 9, no.1, Jan. 1960

Uncl.

POSZEPYCYNISKI, W.

In the Moscow Meat Plants. p. 10.

GOSPODARKA MIESNA. (Polskie Wydawnictwa Gospodarcze) Warszawa, Poland
Vol. 11, no. 9, Sept. 1959

Monthly List of East European Accessions. (EEAI) LC. Vol. 9, no. 1,
Jan. 1960

Uncl.

POSZLER, Laszlo, dr.; VAS, Imre, dr.

Follow-up examination of discharged recovered patients.
Tuberkulozis 16 no.4/5:109-112 Ap-My '63.

1. A Szabadsaghegyi Allami Tudoszanatorium (igazgato: Vas
Imre dr. kandidatus) kozlemenye.

(TUBERCULOSIS, PULMONARY) (REHABILITATION)
(OCCUPATIONAL THERAPY) (EXERCISE THERAPY)
(ANTITUBERCULAR AGENTS) (STATISTICS)
(RESPIRATORY FUNCTION TESTS)

POSZLER, Laszlo, dr.; VAS, Imre, dr.; technikai munkatars: SITERI, Antalne

Contribution to a simple functional diagnosis of tuberculosis. Tuberkulozis 14 no.1:4-6 Ja '61.

1. A Szabadsaghegyi Allami Tudoszanatorium (igazgato: Vas Imre dr. kandidatus) kozlemenye.

(TUBERCULOSIS diag)

POSZLER, Laszlo, dr.; ELSNER, Klara

Role of gymnastics in healing of surgical patients. Tuberkulozis 14
no.12:370-374 D '61.

1. A Szabadsaghegyi Allami Felnott Tbc Szanatorium (igazgato: Vas Imre
dr. kandidatus) kozlemenye.

(SURGERY OPERATIVE) (EXERCISE THERAPY)

POSZLER, Laszlone

Formation of the saturation induction of microwave ferrites in the function of burning conditions. Hir techn 13 no.3:111-115 Je '62.

1. Tavkozlesi Kutato Intezet, es Hirasastechnikai Tudomanyos Egyesulet tagja.

24.2200 (1137, 1144, 1147)

26905
H/009/61/000/005/003/003
D018/D105

AUTHORS: Tardos, László, Mrs., Doctor and Poszler, László, Mrs., Doctor

TITLE: Data on modifying the temperature coefficient of initial permeability of MgAlMn ferrites

PERIODICAL: Magyar Híradástechnika, no. 5, 1961, 202-204

TEXT: The article deals with the temperature coefficient for initial permeability of MgAlMn ferrites, explaining, on the basis of several experiments, that this coefficient is affected by the heat treatment which causes internal strain. The Curie temperature, which is dependant on the chemical composition of the ferromagnetic material and not on the crystal structure, is more difficult to determine in ferrites than in metals. In general, the temperature coefficient is determined by structural factors affecting also the permeability. This has been proved by experiments in which MgAlMn ferrites were produced by conventional production technology; the initial permeability grew with the rise of temperature to 1.35-7.15-times its value at 20°C. Table 1 shows, as a function of the final heating temperature, the relation between the initial permeability

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26905

H/009/61/000/005/003/003

D018/D105

Data on modifying the temperature

and the Curie temperature of two ferrite groups with different chemical compositions prepared at a heating rate of 150°C/hour and a cooling time of 10 hours. Table 2 shows a heat treatment with a different heating rate, while Table 3 gives the relation between the specific gravity, permeability and Curie temperature. In analyzing the temperature coefficient of permeability of ferrites with identical chemical composition but produced by different production technology, the authors point out the importance of the anisotropy coefficient and the possibilities and obstacles of reducing the internal strain caused by heat treatment. Fig. 1 shows the temperature curves for permeability of four samples listed in Table 3. Experiments with samples of nearly identical density, initial permeability and Curie temperature revealed that by decelerating the heat treatment, the temperature coefficient decreases, i.e. the effect of the heating is greater than that of the cooling and that the temperature is affected more by the introduction of oxygen than nitrogen. The results of these experiments on several ferrites of two different chemical compositions are shown in Table 4 and 5 and in Fig. 2 and 3. There are 3 figures and 5 tables.

ASSOCIATION: Távközlési Kutató Intézet (Telecommunication Research Institute).

Card 2/8

TARDOS, Laszlone, dr.; POSZLER, Laszlone, dr.

Data on the formation of the temperature coefficient of the initial permeability of Mg-Al-Mn ferrites. Magy hir techn 12 no.5:202-204
0 '61.

1. Tavkozlesi Kutato Intezet.

POSZONYI, JOZSEF

RISKO, Tibor, dr. POSZONYI, Jozsef, dr.

Experiences with surgery in coxitis tuberculosa in childhood.
Gyermekegygyaszat 8 no.3-4:92-105 Mar-Apr 57.

1. Az Allami Fodor Jozsef Tbc. Gyogyintezet, Budapest (Igazgato-
foorvos: Risiko, Tibor, dr.) es a Szabadsaghegyi All. Tbc.
Gyermekegyaszatorium (Igazgato-foorvos: Flesch, Istvan, dr.)
Extrapulmonalis Osztaly (Foorvos: Pozsonyi, Jozsef, dr.)
kozlemenye.

(TUBERCULOSIS. OSTEOARTICULAR, in inf. & child
hip, surg. (Hun))

SZARY, Stanislaw; POSZUMSKI, Dominik

Obesity following PAS and isoniazid therapy. Polski tygod. lek.
11 no.21:946-948 21 May 56.

1. Z Oddzialu Gruzliczego Szpitala Miejskiego w Piotrkowie Tryb.;
ordynator: dr. St. Szary; dyrektor: dr. A. Klonecki. Szpital
Miejski, Piotrkow Trybunalski.

(NICOTINIC ACID ISOMERS, injurious effects,
isoniazid, causing obesity, with PAS (Pol))
(PARAAMINOSALICYLIC ACID, injurious effects,
obesity, with isoniazid (Pol))
(OBESITY, etiology and pathogenesis,
isoniazid with PAS (Pol))

POSZVEG, R.

Transducers for measuring. p. 29. ELEKTROTECHNIKA. (Magyar Elektrotechnikai Egyesulet) Budapest. Vol. 49, no. 1, Jan. 1956.

SOURCE: East European Accessions List (EEAL), Library of Congress
Vol. 5, no. 6, June 1956

POSZVEG. R

M. Bochet and E. Gombert's article "Putting Reserve Generator Groups into operation Rapidly"; a review. p. 251
ELEKTROTECHNIKA. (Magyar Elektrotechnikai Egyesulet) Budapest.

SOURCE: East European Accessions List (EEAL) Library of Congress,
Vol. 5, No. 11, November 1956

POSZWA, E.

"Some Difficulties of Organization Encountered in the Designing of Sanitary Water Engineering." p. 198 (GOSPODARKA WODNA, Vol. 13, No. 6, June 1953) Warszawa

SO: Monthly List of East European Accessions, Library of Congress, Vol. 2, No. 10, October 1953. Unclassified.

POSENA, Edmund, inz.

Prospective problem of air pollution of mineral water.
Gosp wodna 24 no. 8:283-290 S '64.

POSZWINSKA, J.

Introgression between *Primula elatior* (L.) Hill. and *Primula officinalis* L. *Acta soc botan Pol* 34 no.1:45-71 '65.

1. Institute of Dendrology and Kornik Arboretum, Kornik, of the Polish Academy of Sciences. Submitted September 5, 1964.

POSZWINSKA, J.

Experimental center of agriculture and forestry in Rome. p. 73

SYLWAN (Wydział Nauk Rolniczych i Lesnych Polskiej Akademii Nauk i Polskie Towarzystwo Lesne) Warszawa, Poland. Vol. 103, no. 4, Apr 1959

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Card 1/1

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Activity of oxides of U in the decomposition of $2H_2O_2$ varies in the order $UO_2 > UO_3 > U_2O_5$ (prepared by u.v. irradiation of UO_2 in aq. ethanol at room temp.) $< UO_3$ (heated at 600°) $< UO_3$ (heated at 800°) $< UO_3$ (heated at 1000°) $< U_2O_5$ (heated at 800°). The order of activity in peroxidative oxidation of HCO₂H at 37°, and of indigo carmine at 20°, is UO_3 $< U_2O_5$ $< UO_3$ (heated at 600°) $< UO_3$ (heated at 800°) $< UO_3$ (heated at 1000°). The order of activity in peroxidative oxidation of benzidine in aq. AcOH is UO_3 $< UO_3$ (heated at 600°) $< UO_3$ (heated at 800°) $< UO_3$ (heated at 1000°) $< U_2O_5$ (heated at 800°). The oxides are of equal activity in peroxidative oxidation of pyrogallol. (14 references.)
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